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*Ed. Lowell*  
*Sept 01*

# Loomis Filters.





HOURS:  
to 12 A.M.  
Except Sundays.

DR. J. WILLIAM WHITE,  
1810 South Rittenhouse Square,  
Philadelphia, Pa.

I have now been using the Loomis-Mann-  
-ning Filter for some time in my house  
and it gives me pleasure to testify to  
the entire satisfaction which it has  
given me. I regard it not as a luxury  
but as a necessity and would not be  
without it on any consideration.

The increased comfort and safety  
conferred by it in all the uses to  
which the water supply is put make  
it worth to me many times its cost.

William White.

1896.





# LOOMIS-MANNING FILTER CO.

402 CHESTNUT STREET,

PHILADELPHIA.

## BRANCH OFFICES AND SALESROOMS:

NEW YORK: Havemeyer Building, 33 Church Street

BOSTON: 440 Exchange Building, 53 State Street

BALTIMORE: 341 N. Charles Street

WASHINGTON: 620-14th Street, N. W.



## ERECTING SHOPS

2005 MARKET STREET, PHILADELPHIA, PA.

6 and 8 S. TWENTIETH STREET, PHILADELPHIA, PA.



## TELEPHONE CONNECTION

MAIN OFFICE, 402 CHESTNUT STREET, PHILADELPHIA, PA.

NEW YORK OFFICE, HAVEMEYER BUILDING, 33 CHURCH STREET

ERECTING SHOPS, 6 and 8 S. TWENTIETH STREET, PHILADELPHIA, PA.

EQUIPPED WITH LONG DISTANCE TELEPHONE SERVICE



# LOOMIS SYSTEM FILTRATION

---

OUR PATENTS COVER THE ONLY SAFE PRINCIPLES, AND THE VERY LATEST  
MECHANICAL APPARATUS FOR THE FILTRATION OF WATER



PURIFICATION OF ALL WATER SUPPLIES

BY THE

LOOMIS SYSTEM OF FILTRATION

PRESSURE OR GRAVITY



CITY, TOWN AND VILLAGE WATER SUPPLIES PURIFIED

WATER FREE FROM COLOR, TASTE AND SMELL

"RETURN WATER" FREED FROM OIL

SCALE-PRODUCING WATERS RENDERED HARMLESS



FOR ALL BRANCHES OF MANUFACTURES

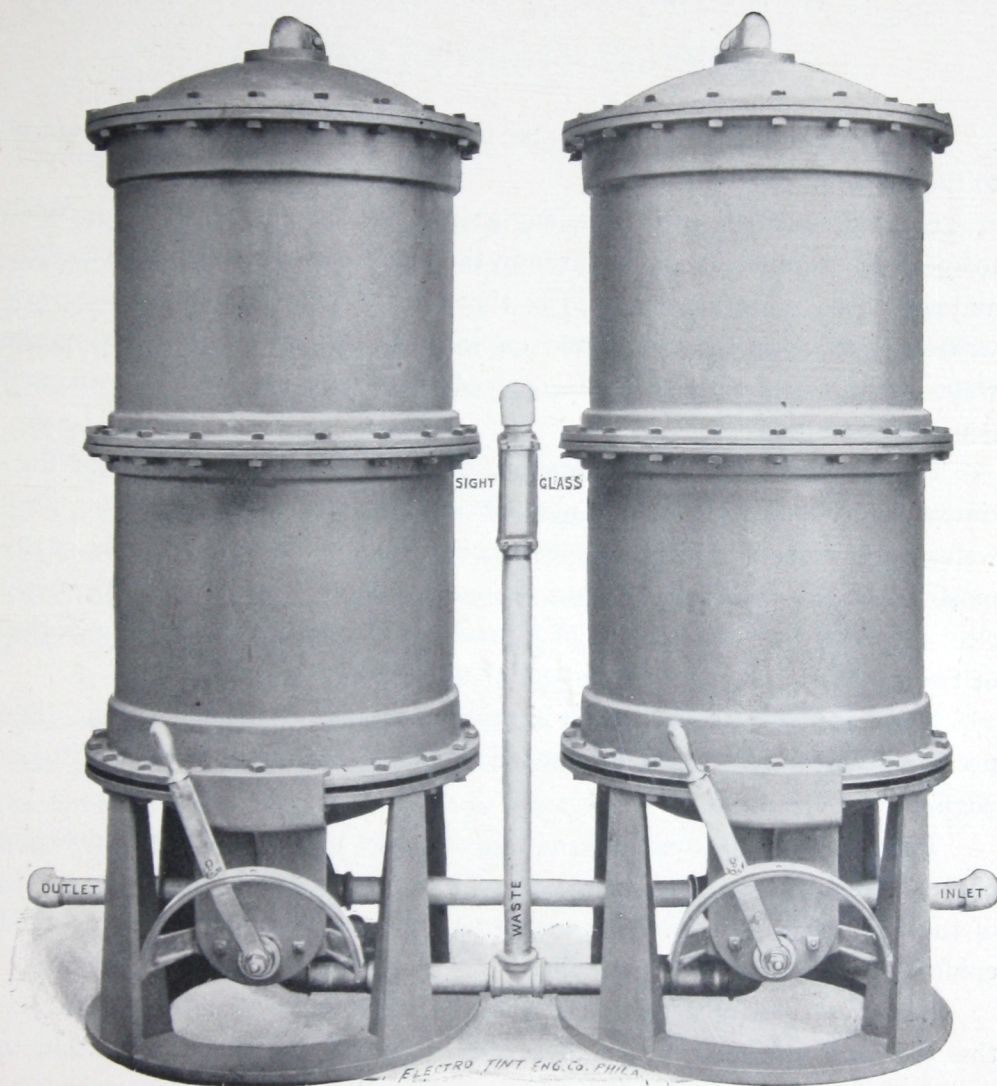
MILLS, DYE AND BLEACH WORKS, BOILER PLANTS, SUGAR REFINERIES, PAPER  
MILLS, LAUNDRIES, BOTTLING ESTABLISHMENTS

PURE WATER FOR PUBLIC BUILDINGS, HOTELS, PUBLIC AND PRIVATE INSTITUTIONS,  
HOSPITALS, CLUBS, APARTMENT HOUSES, OFFICE BUILDINGS  
AND PRIVATE RESIDENCES

---

ONLY THE MOST ADVANCED METHODS





FRONT ELEVATION LOOMIS IMPROVED WATER FILTER, DOUBLE CYLINDER



## A WORD BY WAY OF PREFACE

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We present this pamphlet to the public without extended argument as to the advantages of filtration.

Sanitary experts, scientists, engineers, physicians and others qualified to speak on the subject, have, through the medium of the scientific, medical and engineering journals, as well as through the press in general, said and written so much in discussing and exploiting the necessity of filtering the water we use, that the benefits derived therefrom are well known and generally admitted.

Consequently, we shall confine ourselves almost exclusively to the illustration and explanation of our methods of, and means for, producing pure water as developed by our improved mechanical appliances, which are of the most advanced type for filtering waters, and for washing and perfectly cleansing filter beds, the results of a practical experience covering a period of twenty years.

There is nothing so important to persons or communities as health. The use of impure water invites disease and renders continuous good health impossible.

Impure water is the cause of the majority of cases of typhoid fever, cholera and other zymotic diseases, and it is a scientific fact that the germs of these diseases are always transmitted by water, producing the dreaded epidemics so fatal to health and life.

Self-preservation has, through scientific experiment, convinced mankind that the most practical, best and safest way to remove these germs and to guard against their transmission is to properly filter the water.



## AN INVITATION : TO YOU !

---

We are the only manufacturers who exhibit by glass model the complete working of a filter, illustrating thereby the process of filtration, showing the operation of intercepting the refuse and suspended matter, and producing from the contaminated and unclean current the purified sparkling stream ; also, showing the method of cleansing the filter, the simplest and most perfect known.

We invite every one interested in the subject of filtration to call at any of our salesrooms and examine the working model. Competent men in attendance will explain fully our system, and give any desired information.

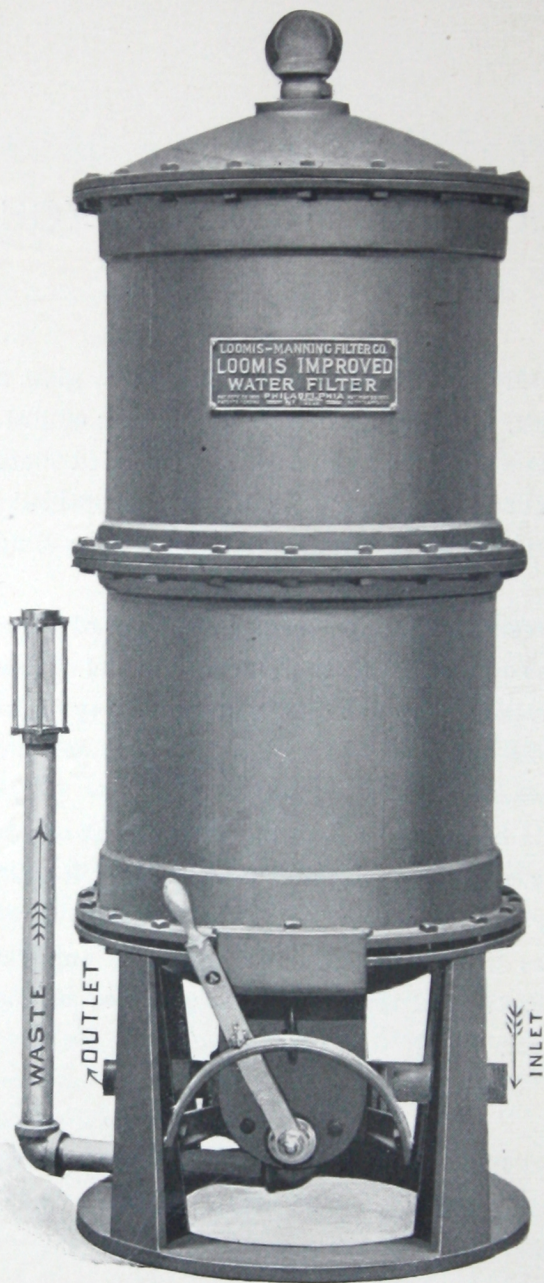
Various styles and sizes of filters are also on exhibition, from which a selection can be easily made.

Or we should be pleased to call by appointment at your residence with a glass model filter, and have you see how perfectly it will cleanse the water, and how quickly and perfectly it will cleanse itself. It requires but from ten to fifteen minutes to do this without expense or annoyance to you, and it will, without doubt, be of the greatest importance to you.

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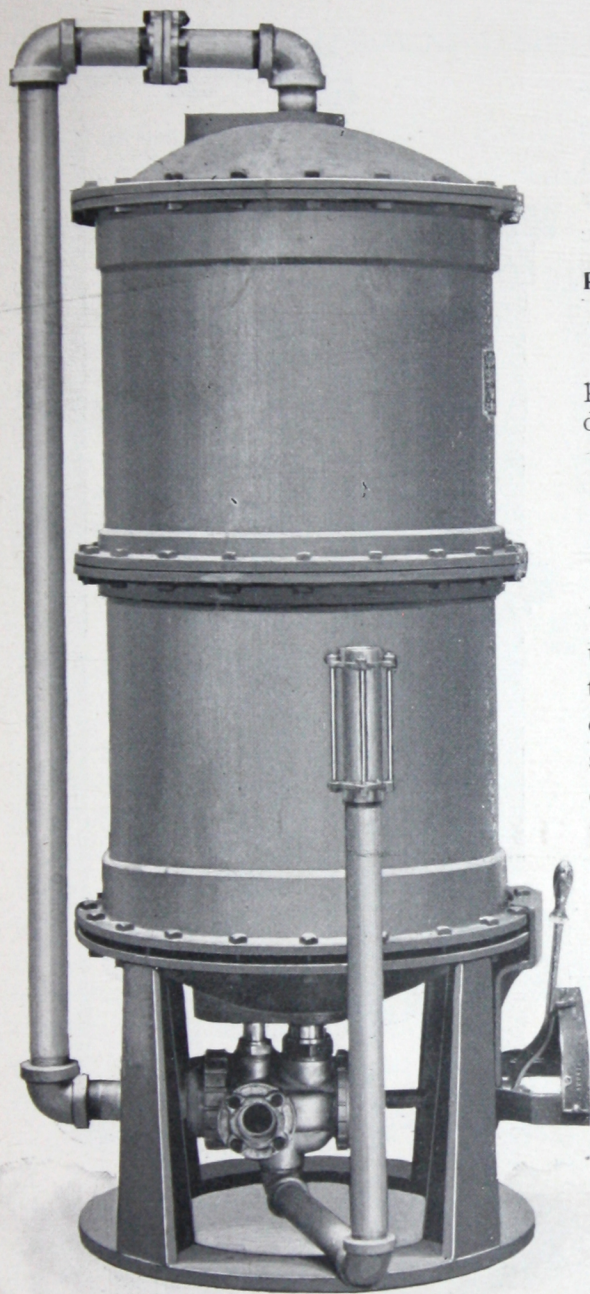
“PURCHASERS SEE BEFOREHAND WHAT THEY  
WILL RECEIVE”





FRONT ELEVATION  
LOOMIS IMPROVED WATER FILTER  
SINGLE CYLINDER





LEFT SIDE ELEVATION  
LOOMIS IMPROVED WATER FILTER  
SINGLE CYLINDER

## INSTRUCTION



### PURE WATER IN THE HOME

A necessary and most desirable part of the equipment of a modern dwelling is

A Filter to Purify

All the Water . . .

used in the household. Erected in the cellar or basement, connected direct to the water-main and house-supply pipes, every drop of water entering the building passes through it and is purified. By this means a perfectly pure and wholesome water is furnished throughout the house. Then "a cup of cold water" ceases to be a menace to health, linen comes white and clean from the laundry, the daily bath becomes a daily pleasure, the enjoyment of the porcelain tub is enhanced, the cook is happy, the laundress beams with satisfaction, and the radiance of sparkling water reflects a glow of wholesomeness and health over the entire household.



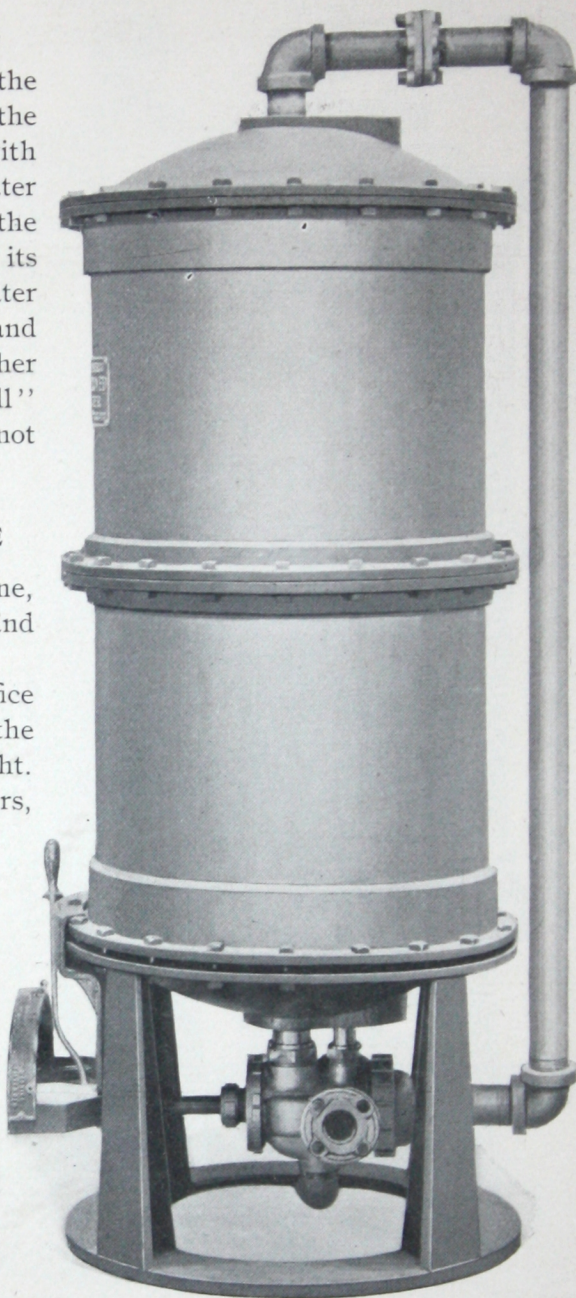
## PURE WATER FOR THE HOTEL

All that can be said of the advisability of purifying all the water used in dwellings applies with equal, and perhaps with greater force, to hotels. The bath of the wearied traveler loses largely of its refreshing invigoration if the water he draws be muddy and foul, and the "clink of the ice in the pitcher as the boy comes through the hall" loses its music if the water be not clear and bright.

## PURE WATER FOR THE OFFICE

In the office, as in the home, pure water is just as desirable and equally appreciated.

In high-grade, modern office buildings a filter to purify all the water is as essential as heat or light. It saves labor and repairs on boilers, it saves the cleaning of tanks, preserves plumbing, does away with the grit and sand in water, which wears out elevator machinery, and makes cleanliness and comfort everywhere. It gives tenants pure drinking water, saves them the expense of purchasing so-called "spring water" or of individual filters for their separate offices, and its tendency is to make them permanent occupants, as it adds one more, and that the greatest, essential to health and good living.



RIGHT SIDE ELEVATION  
LOOMIS IMPROVED WATER FILTER  
SINGLE CYLINDER



## THE FILTER A COMMERCIAL NECESSITY TO THE FACTORY

The use of a Loomis Filter in a factory will prove just as economical and satisfactory as elsewhere.

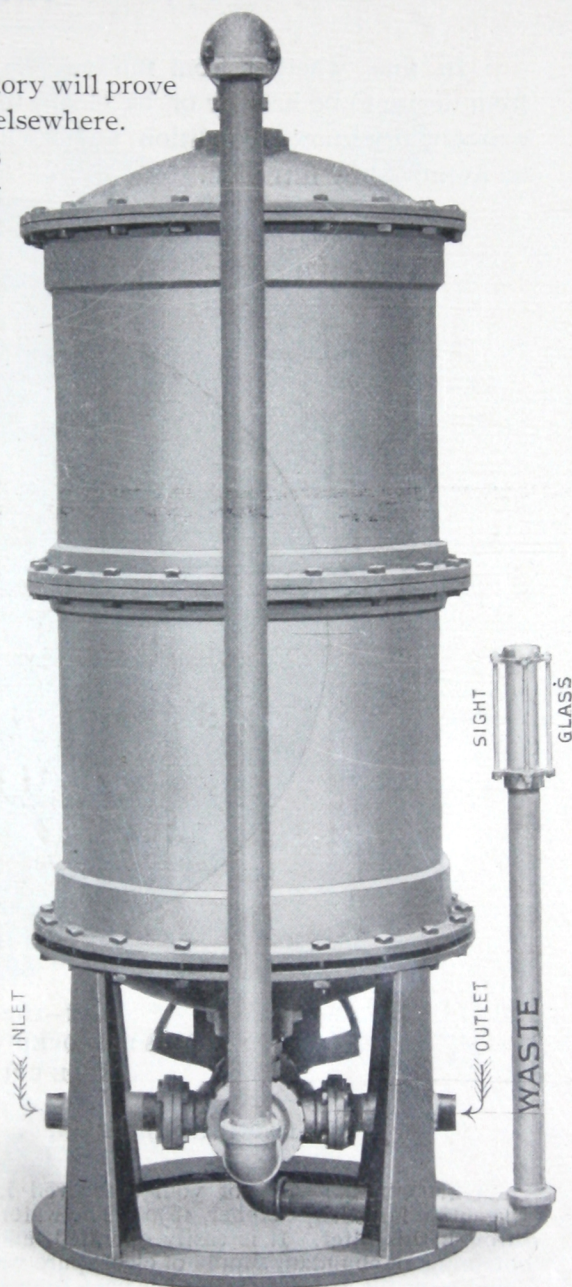
Water is used to a greater or less extent in almost every manufacturing plant, and, from an economical point of view alone, every such plant should be equipped with filters, as dirty water spoils everything it comes in contact with, often reducing, materially, the value of the product, while with all right-minded managers the conservation of the health of their employees is ever a vital question.

## THE BOILER

Steam boilers should never be used without a Loomis Filter, no matter what water is used.

To feed into a boiler the polluted, muddy, slimy, scale and rust-producing liquids that corrode and finally destroy it increases immeasurably its cost of operation, and often causes explosion and consequent loss of property and human life.

The extra consumption of fuel necessary to overcome the evil effects of incrustation of boilers, caused by the use of impure water, averages, by the best authorities, full 50 per cent.

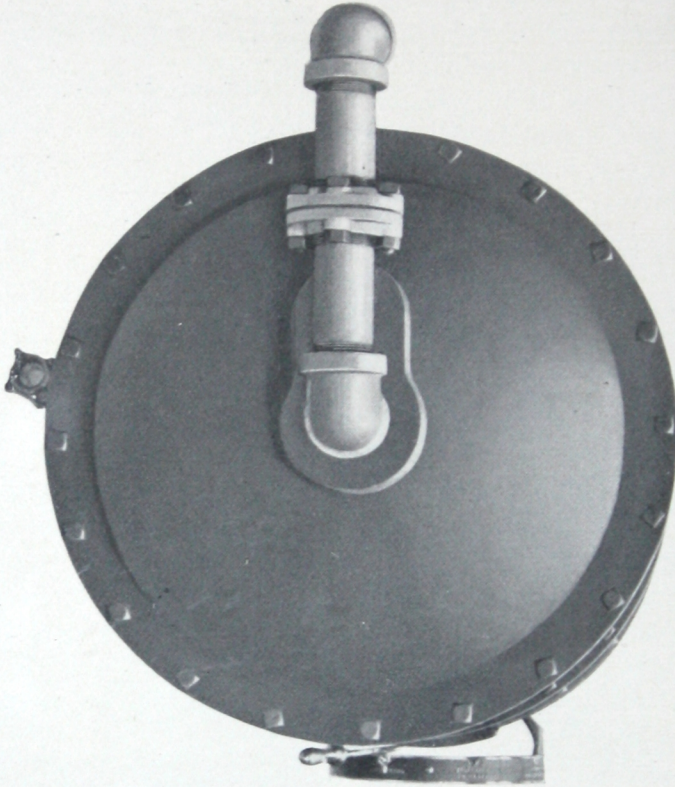


REAR ELEVATION  
LOOMIS IMPROVED WATER FILTER  
SINGLE CYLINDER



## PROFIT AND LOSS

In fine, whether from motives of economy or philanthropy, whether from desire to be healthy or be clean, to gain profit or prevent loss, there is scarcely any known condition under which water is used which would not be improved by filtration.



PLAN—TOP VIEW  
LOOMIS IMPROVED WATER FILTER  
SINGLE CYLINDER

**The Executive Mansion, . . . "White House."**

WASHINGTON, D. C.

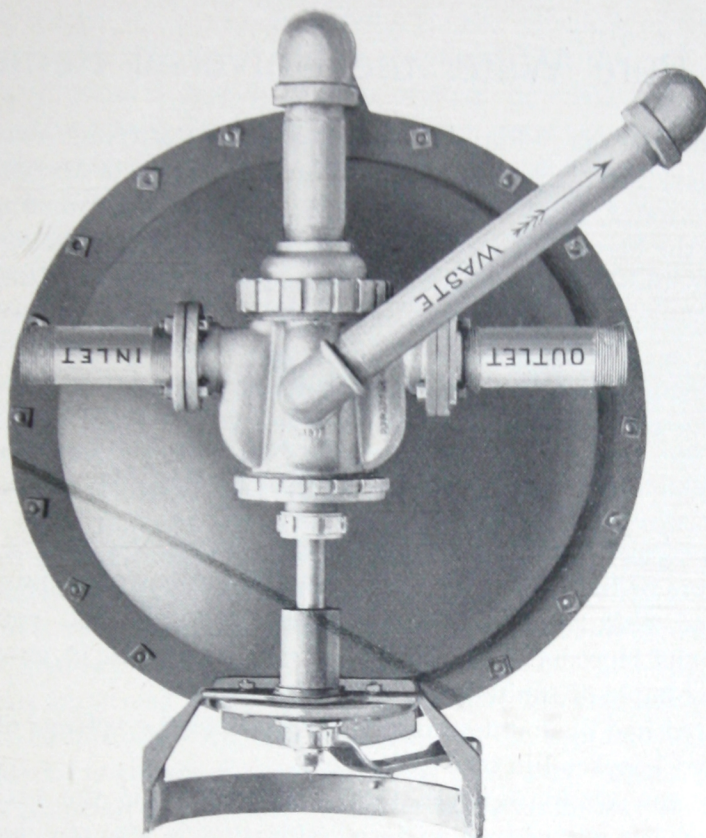
GENTLEMEN:—One of your Improved Loomis Filters (No. 4) was placed in the Executive Mansion, October, 1890. The water-supply for the Executive Mansion passes through this filter. It is easily operated, and no difficulty has been experienced in obtaining an abundant supply of clear, pure water at any time, although from the frequent rains the Potomac water has been frequently very muddy.

Very respectfully,

JOHN BROWN,  
Plumber Executive Mansion.



PLAN—BOTTOM VIEW



OF  
LOOMIS IMPROVED WATER FILTER  
SINGLE CYLINDER

UNIVERSITY OF PENNSYLVANIA BUILDINGS

EQUIPPED WITH

LOOMIS-MANNING FILTERS:

HOUSTON (STUDENTS') HALL

DENTAL COLLEGE

DORMITORIES

COLLEGE HALL

DINING HALL



## Pure Water the Universal Remedy

Extracts from "Filtration as a Process of Purifying Water," by C. W. Chancellor, M.D., Secretary State Board of Health of Maryland:

Pure water, in the opinion of Hoffman and other distinguished physicians, is the best drink for persons of all ages and temperaments, and, of all the productions of nature and art, comes the nearest to a universal remedy for all diseases. It is the best solvent and diluent of the solid portions of our food, supporting the tone of the stomach without exhausting its vigor, and furnishing the most simple and suitable supply to the secretory vessels and to the general humidity of the body.

### The Fountain of Youth

Experience taught the ancients that the greater part of their ailments were, more or less, amenable to treatment by the use of pure water. The temple of Æsculapius was erected near a "perennial spring of crystal water," and Herodotus mentions a spring "possessed of curative powers," near the temple of Jupiter Ammon.

Delphi had his fountain of Casostris, while the springs of Sineusa were considered beneficial in many diseases.

That the relation between the human body and the healing agency of pure water has not escaped modern civilization is also obvious. Pinder has declared that "water is the best remedy," and that wisest of modern physicians, Dr. Dumoulin, said, on his death-bed: "I leave behind me three great physicians, water, exercise and diet." Sydenham, Bergeron, Hufeland, Trusseau, Liebig, Niemyer, Charcot, Brouardel, Sir Henry Thompson and a host of other distinguished physicians have all borne witness to the salutary influence of pure water.

These opinions from the most eminent authorities reflect the ripened judgment and cumulative experience of the present age on the direct relation existing between the health of a community and the use of a clear, bright, wholesome water. There can be no dissent from the position that every household water-supply should be rendered as pure as advanced art can make it.



## Learned Minds

One of the most eminent authorities in this country on water purification, Dr. Chas. Smart, U. S. A., in a letter on the filtration of the water-supply of Washington city, says: "I am convinced that the prevalence of malaria in Washington is largely due to organic impurities in the water which can be removed by filtration." Filtration removes from a surface water the essence of remittent fever that may be present in it.

Mr. Chas. F. Wingate, Consulting Sanitary Engineer of New York, has said: "The importance of thorough filtration of drinking water can hardly be over-estimated. The sources of both public and private supplies are so liable to contamination by dangerous impurities that no dependence can be placed upon their purity."

There can be little doubt but filters are too frequently regarded as a kind of conjuring apparatus which will go on yielding to an infinite extent pure water from dirty water without receiving a tithe of the cleaning and attention which are bestowed upon the vessels from which domestic animals are fed.

*Of all the contrivances yet brought forward for filtering household supplies of water, I have seen none that equals the Loomis Improved Filter. Though this filter has many points of excellence to commend it to public and general use, its chief merit and crowning characteristics are to be found in the readiness with which it can be cleaned.*

The Loomis Improved Filter is one of more than ordinary efficiency, and, considering, in connection with other features of the system, the physical and chemical attributes of the filtering material used, this method of purifying water may properly be regarded as the *ne plus ultra* of filtration.

C. W. CHANCELLOR.

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## A Few Prominent Washington Patrons

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### The President of the United States, "White House."

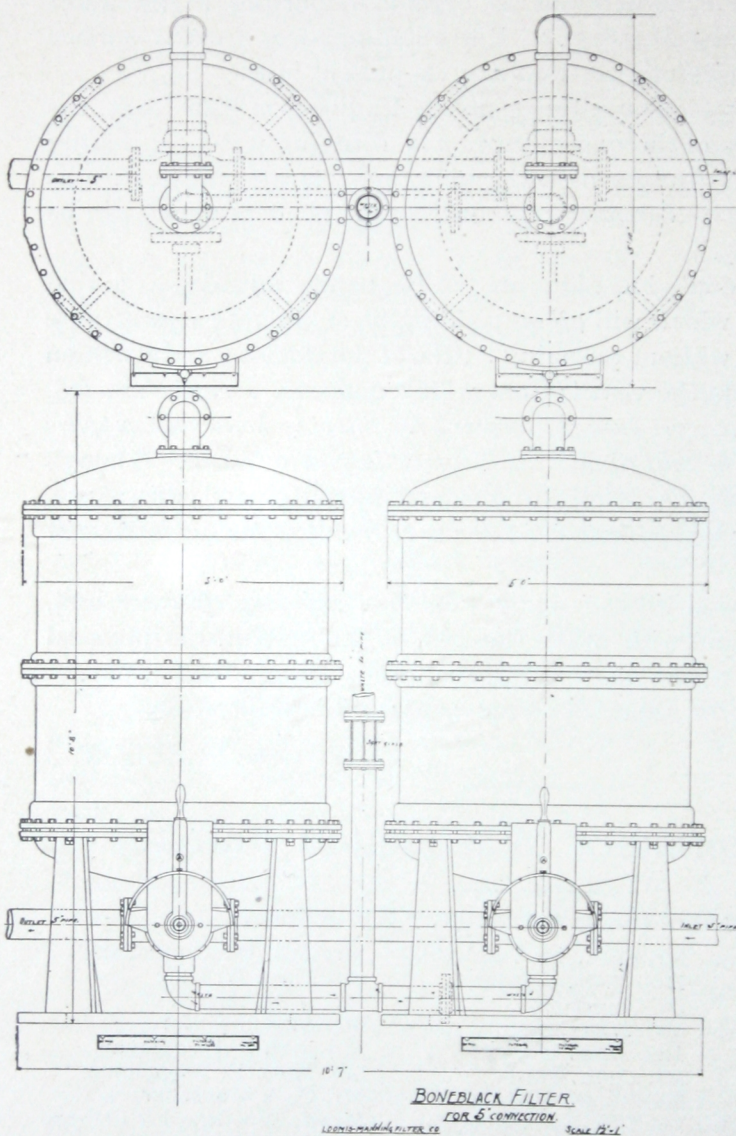
|   |                          |                            |
|---|--------------------------|----------------------------|
| Secretary of State John Sherman         | Mr. Cornelius Vanderbilt | Mr. Geo. Westinghouse      |
| Senator Stephen B. Elkins               | Mrs. B. H. Warder        | Mr. Thos. W. Gale          |
| Senator George P. Wetmore               | Dr. Magruder             | Mr. L. M. Saunders         |
| Justice John M. Harlan                  | Mr. Chas. Munn           | Mr. Allison Nailor         |
| Justice Brown                           | Mrs. D. P. Morgan        | Mr. John F. Waggaman       |
| Justice Peckham                         | Mr. C. E. Ward           | Mr. Thos. E. Waggaman      |
| Sir Julian Pauncefote, British Legation | Mr. Robert Portner       | Mr. Chas. Rauscher         |
| Hon. M. Romero, Mexican Legation        | Mr. J. S. Larcombe       | Messrs. Woodward & Lothrop |
| Mr. Levi V. Leiter                      | Mr. A. L. Barber         | Mr. A. M. Lothrop          |
|   | Mr. F. De C. May         | Mr. Thomas Nelson Page     |
|   | Mr. M. M. Parker         | Mrs. W. C. Gurley          |
|   | Mr. C. C. Glover         |                            |



## A Few Prominent Philadelphia Patrons

**Dr. Samuel G. Dixon,**  
President Academy of Natural Sciences

**Mr. John H. Michener,**  
President Bank of North America



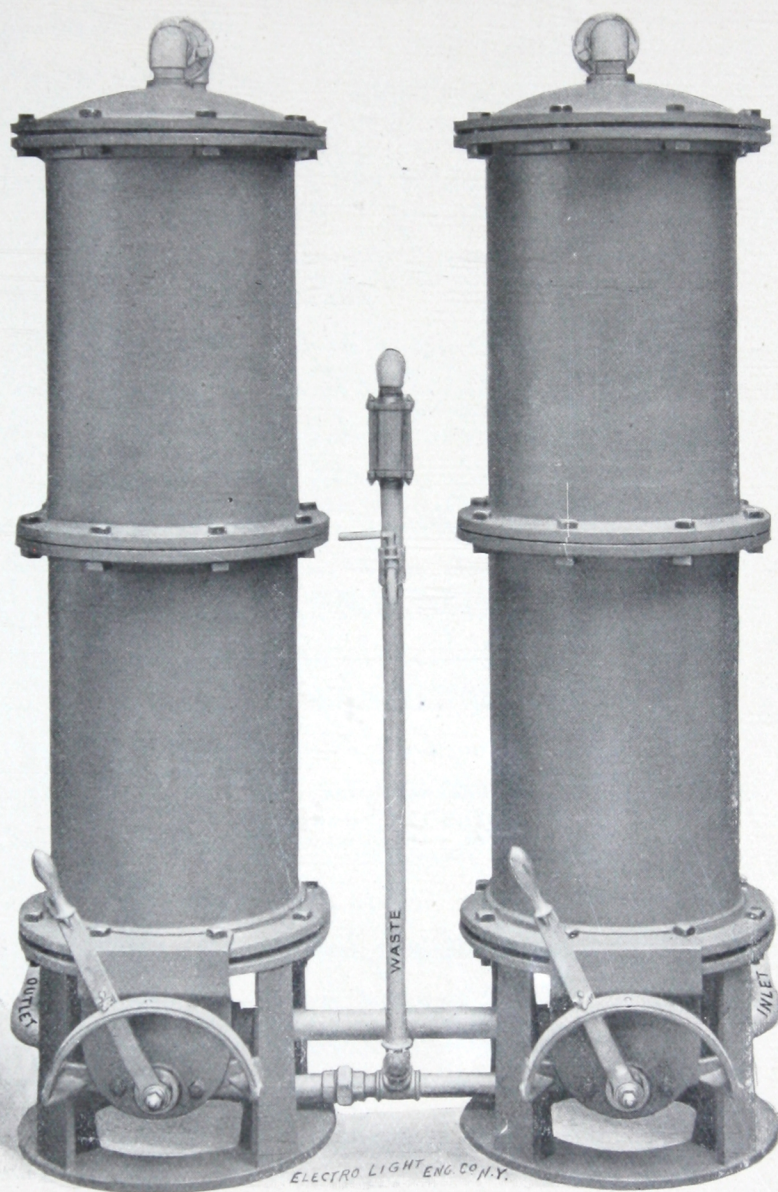
Mr. A. C. Harrison  
Dr. W. W. Keen  
Mr. J. Sargeant Price  
Senator Geo. F. Edmunds  
Mr. Wm. M. Cramp  
Mr. Jos. G. Rosengarten  
Mr. Richard C. Dale  
Mr. Edwin N. Benson  
Mr. John Campbell Harris  
Mr. Theodore Justice  
Mr. Geo. Watson  
Mr. Thomas Dolan  
Mr. Francis L. Potts  
Mr. Allen B. Rorke  
Mr. Geo. D. McCreary  
Mr. John A. Brown  
Mr. Walter Horstmann  
Mrs. Alexander Brown  
Mr. John T. Morris  
Mr. Jas. L. Caven  
Hon. Edwin H. Fitler  
Mr. C. B. Wright  
Dr. Chas. M. Seltzer  
Mr. Wm. H. Brown  
Chief Engineer P. R. R.  
Mr. Alexander M. Fox  
Dr. John Welsh Croskey  
The Misses Blanchard  
Mrs. L. Rodman Fox  
Mr. Samuel B. Huey  
Mr. Chas. P. McCully  
Dr. F. W. Lewis

PLAN AND FRONT ELEVATION OF DOUBLE CYLINDER BONEBLACK  
LOOMIS IMPROVED WATER FILTER.



## A Few Prominent Philadelphia Patrons

Mr. Thomas McKean, Jr.  
 Dr. Geo. Fales Baker  
 Mr. R. G. Oellers  
 Mr. Earl B. Putnam  
 Mr. Geo. H. McFadden  
 Dr. C. N. Peirce  
 Mr. Wm. Bault  
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 Mr. L. G. Fouse  
 Mr. John Y. Huber  
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 Mr. J. Albert Caldwell  
 Mr. Mitchell Harrison  
 Dr. Milton J. Greeman  
 Mrs. Thomas Smith  
 Mr. Benjamin C. Allen  
 Dr. Morris S. French  
 Mrs. Wm. A. Griswold  
 Messrs. Gimbel Brothers  
 Wm. Cramp & Sons  
 Mr. J. Vaughan Merrick  
 Mr. Samuel W. Evans, Jr.  
 Mr. William Wright



FRONT ELEVATION  
 LOOMIS IMPROVED WATER FILTER  
 DOUBLE CYLINDER—HOUSE SIZE



3913 Chestnut Street  
Phila<sup>a</sup> Oct. 25<sup>th</sup> 1897

Dear Sir -

It gives me pleasure to add my  
testimony to that of others, concerning the  
Loomis-Manning Filter.

Residing as I do in West Philadelphia  
where that portion of the City's water supply  
is furnished by direct pumpage from the Schuylkill  
River, my family had long been annoyed at its  
filthy condition, particularly after heavy rain  
and stormy weather, when it was rendered unfit  
for use either in bath room, or laundry, and totally  
unfit for table use, or cooking purposes. In such  
dilemma my attention was called to your Filter.  
After investigation, I had one placed in the Cellar  
of my house since which time my whole water supply  
for all purposes, has been pure and free from the  
health contaminating influences and impurities

above referred to. I have used your Filter  
over three years, with entire satisfaction. It  
has brought comfort to our home and we  
would not part with it for many times  
its value if another could not be had.

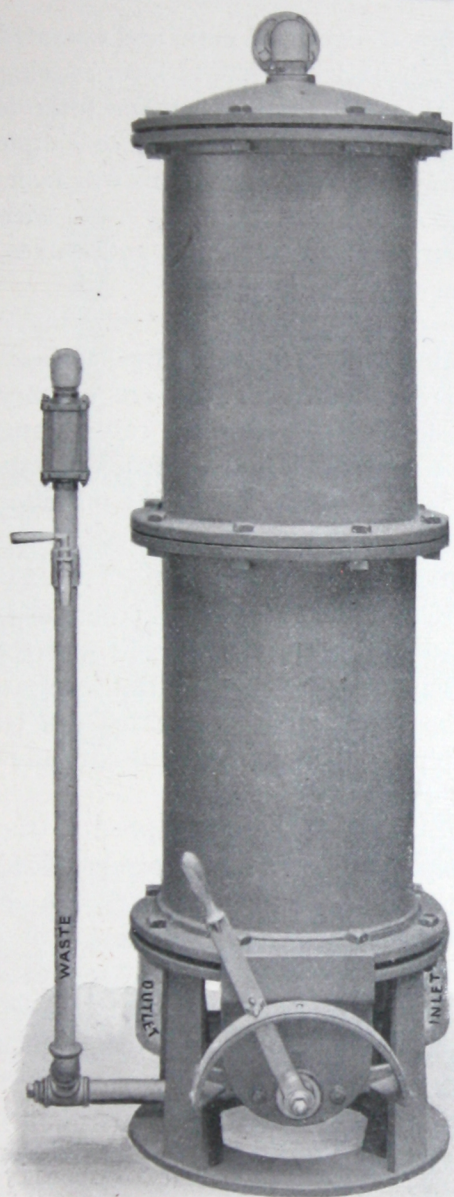
Respectfully Yours,  
J. H. Michener

Joseph O. Manning Esq

President - Loomis-Manning Filter Co.



## Several Prominent New England Patrons



FRONT ELEVATION  
LOOMIS IMPROVED WATER FILTER  
SINGLE CYLINDER—HOUSE SIZE

THE TOWN OF  
LEXINGTON, MASS.

GOVERNOR  
CHAS. WARREN LIPPITT  
PROVIDENCE, R. I.

MR. EBEN JORDAN  
BROOKLINE, MASS.

MR. WM. D. SLOANE  
"ELM COURT FARMS"  
LENOX, MASS.

MR. GEO. H. MORGAN  
NEWPORT, R. I.

MR. D. H. KING, JR.  
NEWPORT, R. I.

MR. I. TOWNSEND BURDEN  
NEWPORT, R. I.

"WARE HALL"  
AND "BECK HALL"  
HARVARD UNIVERSITY,  
CAMBRIDGE, MASS.

WM. LEE CHURCH  
STAMFORD, CONN.

MR. A. C. BURRAGE  
BOSTON, MASS.

JORDAN, MARSH & CO.  
BOSTON, MASS.

CAMBRIDGE SAVINGS BANK  
BUILDING  
CAMBRIDGE, MASS.



# THE MANNING VALVE

The Loomis Improved Water Filters are all equipped with, and operated by, the Manning Single Valve, which is controlled by a single lever moving over a registered dial, showing exactly and at all times what the filter is doing, thus making the work necessary to operate the machine so simple as to render mistakes by the attendant impossible; we have in this way overcome serious troubles arising in the operation of filters, by doing away with the old, complicated and uncertain combination of the numerous gate valves, stops, cocks and other attachments necessary for that purpose.

In its construction all of the combinations required for "Filtering," "Filtering to Waste" or rewashing, "Washing Filter Bed," for "By-Passing" the water, and for draining the filter, are provided for and are quickly obtained by simply moving the operating lever attached to the valve along the plane of the registered dial to the station desired, and according to its location, showing exactly what the filter is doing, thus rendering mistakes by an attendant impossible.

## ONE-EIGHTH OF A CIRCLE

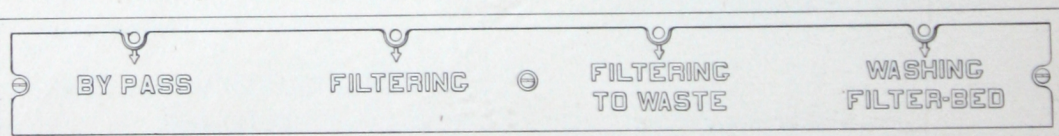
By moving the lever one-eighth of a circle a quick "By-Pass" is obtained.

If at any time repairs or renewals should become necessary, the direct supply can be immediately and continuously used by moving the lever to "by-pass;" this movement also drains the filter, and the machine can be torn down and rebuilt without breaking a pipe connection, and without interfering with the use of the water for a single moment.

The very best gun metal is used in these valves, they are capped in the rear with tailpiece attached to the circuit pipe, and in front they are provided with collar and stuffing box, thus preventing leaks, and making the handling of a six or eight-inch supply of water a comparatively easy task.

It would require the opening and closing—a slow process at best—of a combination of nine gate valves to do the work, which is quickly and easily accomplished by moving the operating lever attached to this valve an eighth or a quarter of a circle.

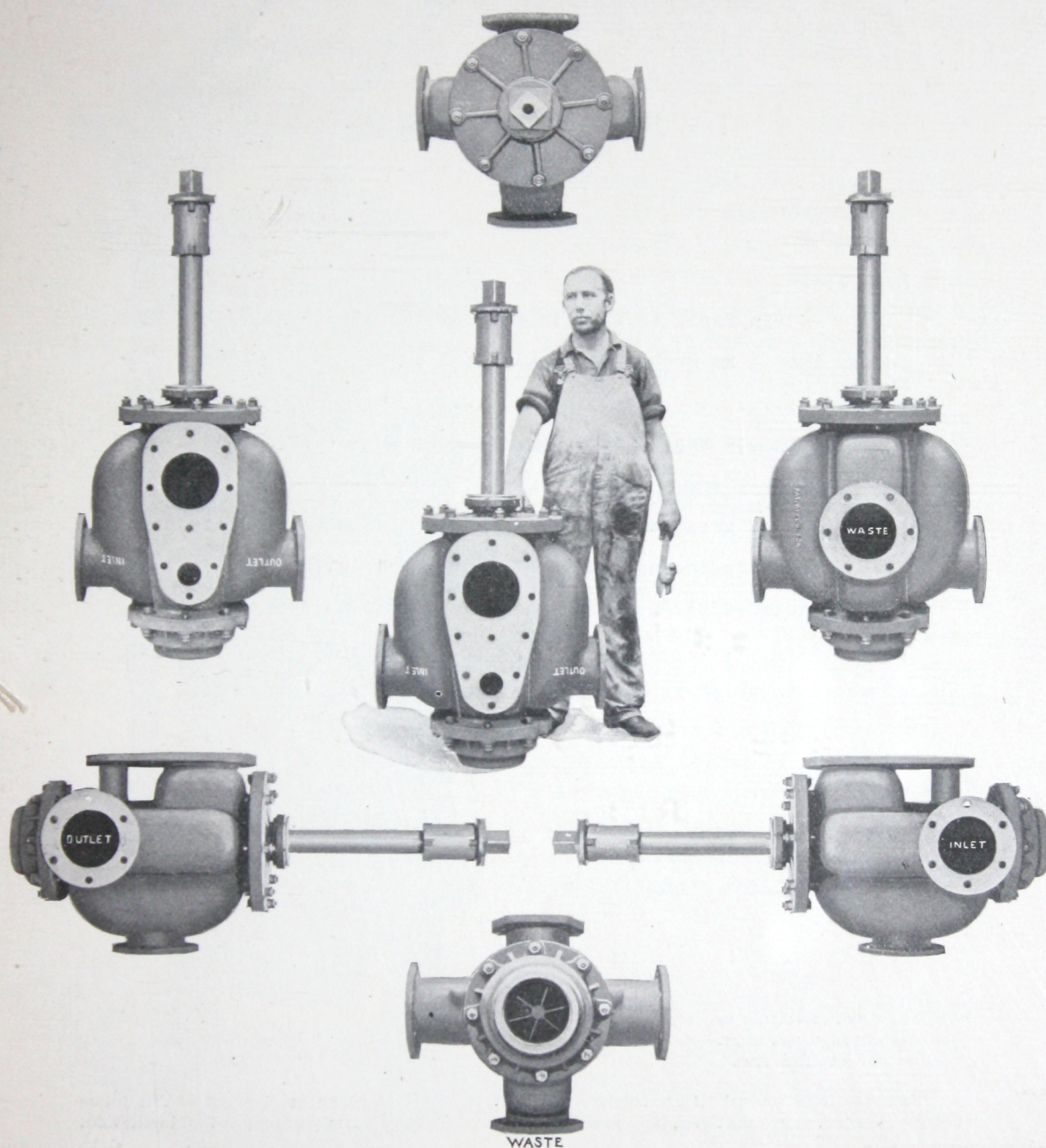
The "Stations" are cast on the "Brass Dial Plate" and are plainly indicated as per accompanying cut which is an exact reproduction of our



"REGISTERED DIAL."



# THE MANNING VALVE



SHOWING TOP AND BOTTOM PLANS, FRONT, REAR AND SIDE ELEVATIONS, AND COMPARATIVE SIZE OF A 6-INCH MANNING VALVE. WEIGHT, 800 LBS. GUN METAL



THE JOHNS HOPKINS HOSPITAL,  
NORTH BROADWAY.

HENRY M. HURD, M. D.,  
Superintendent

June 24, 1897.  
Baltimore, \_\_\_\_\_ '89

Dear Sir:-

In reply to your inquiry of the 23rd inst., I write to say that I am much pleased with the action of the Loomis Filter.....

The Loomis Water Filter has been used in this Hospital for the past six years.

It is of great service in connection with our laundry and also to obviate the necessity of a mud drum in the Boilers.

It does excellent work, and we have reason every day to be grateful.....; we are getting a quality of water to which we have heretofore been wholly strangers.

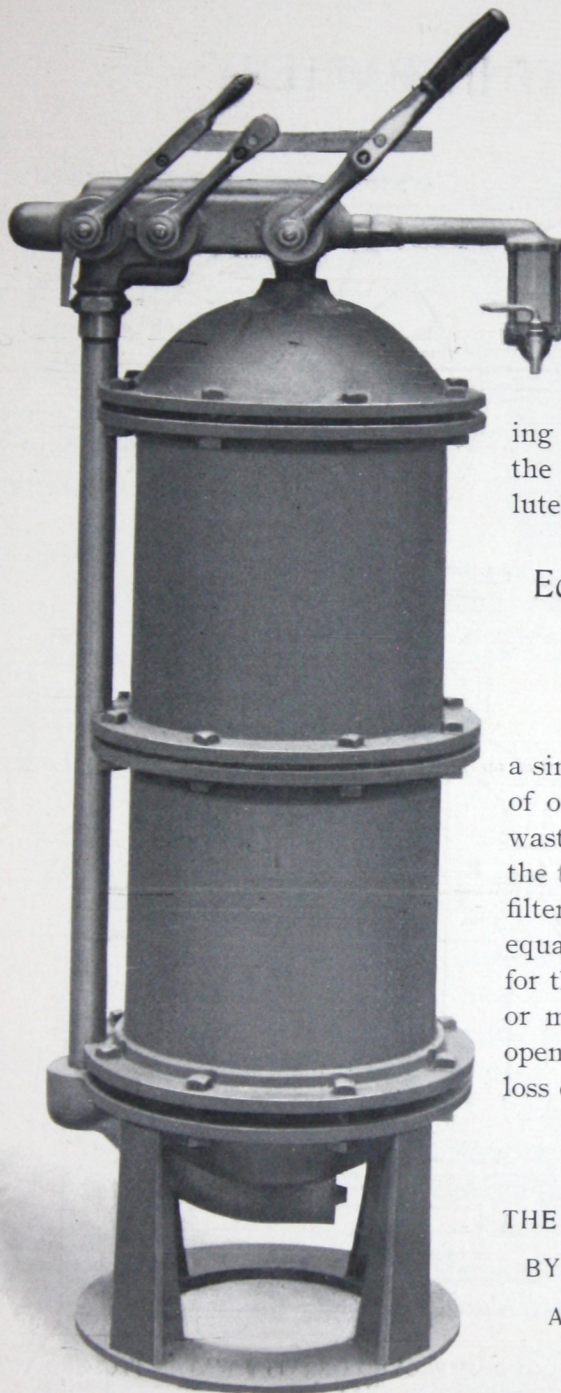
Very truly yours,

*Henry M. Hurd*  
*Supt.*

PUBLISHED BY PERMISSION OF  
DR. HENRY M. HURD, SUPT.  
JOHNS HOPKINS HOSPITAL

Excerpts from several letters received from Dr. Henry M. Hurd, Superintendent of The Johns Hopkins Hospital, at various times, in connection with the use of the Loomis Filters in that institution.





## "SIGHT GLASS"

In the line of the waste connection from our filters there is a "sight glass" (see pages 3 and 9) inserted so that the "wash" and "re-wash" water is under the eye of the attendant during the washing process, thus facilitating and making the cleansing or washing operation absolutely certain and not "guesswork."

### Economy in Use of Single Valve and Sight Glass

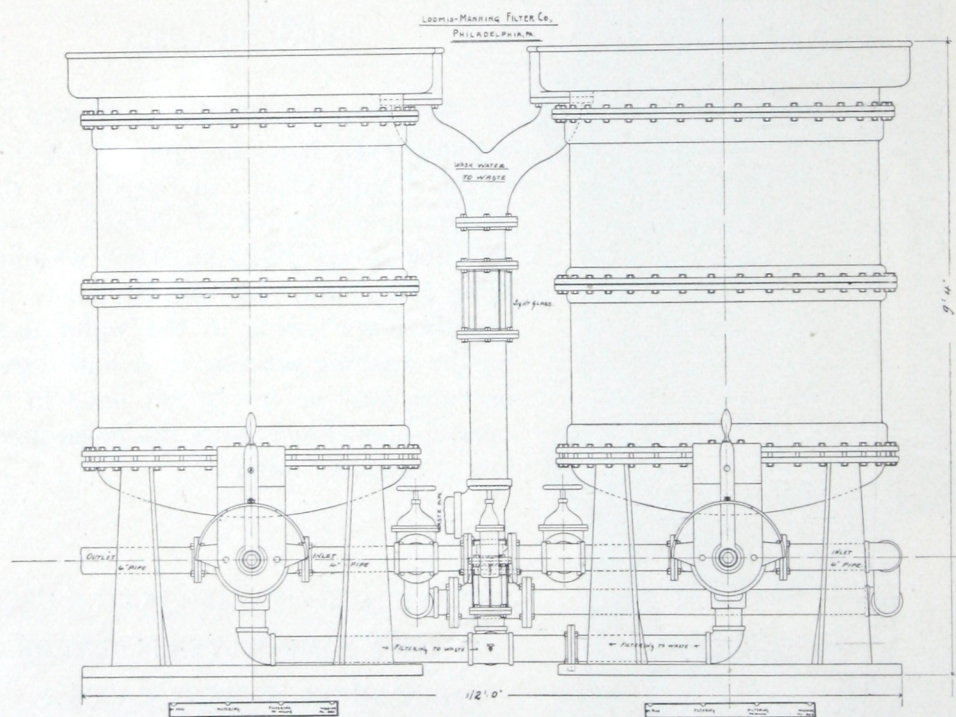
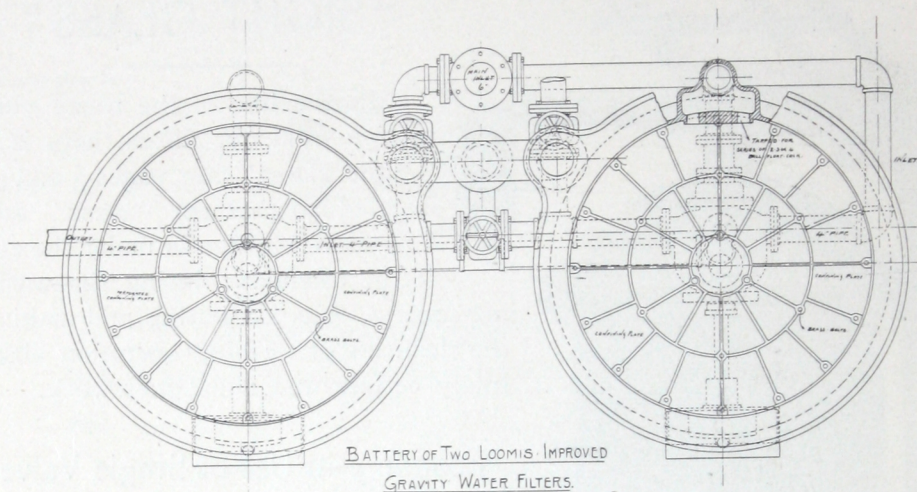
With our single valve, controlled by a single lever, in connection with the use of our "sight glass" in the line of the waste connection, we very largely reduce the time ordinarily required for washing filter beds, and consequently make an equally large saving in the water used for the washing process, as a half dozen or more gate valves do not have to be opened and closed, with the consequent loss of time and water.

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THE AVERAGE OF WASH WATER USED  
BY THE LOOMIS FILTER IS REMARK-  
ABLY SMALL, IN MANY CASES AS  
LOW AS ONE PER CENT.



# ARRANGEMENT IN BATTERY



ARRANGEMENT IN BATTERY OF TWO LOOMIS IMPROVED GRAVITY WATER FILTERS  
SHOWING PLAN AND FRONT ELEVATION

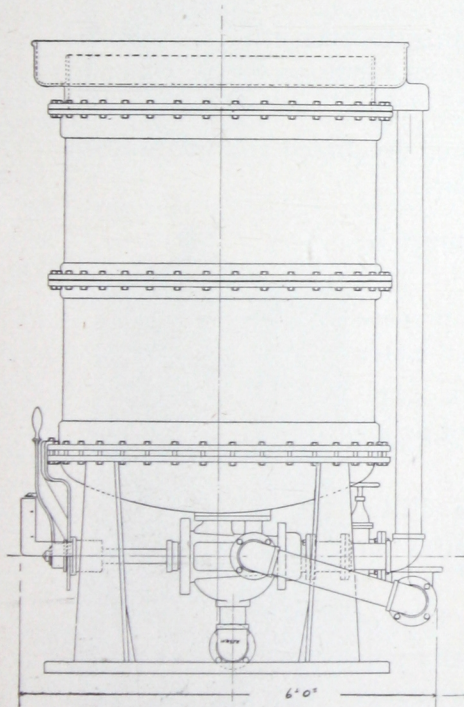


## SUPPORT PLATES.

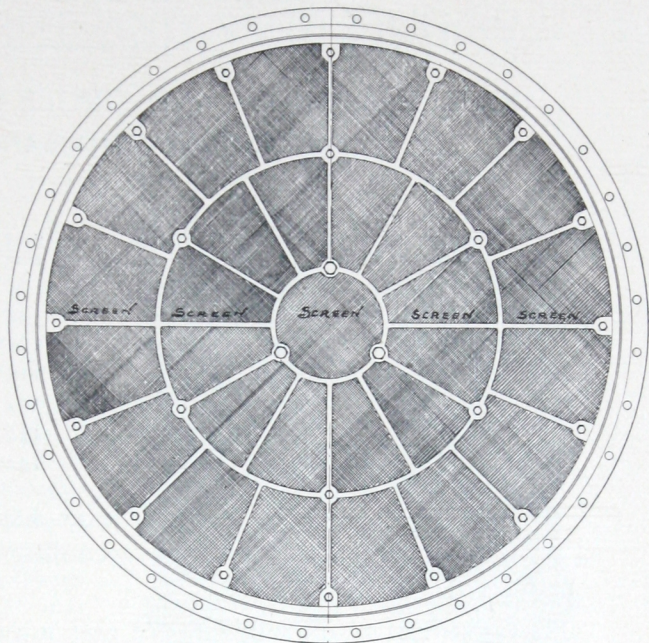
THESE SCREEN PLATES, 4 SEPARATE PERFORATED DIAPHRAGMS OF HEAVY TINNED BRASS, EXTEND OVER THE ENTIRE AREA OF THE FILTER BED.

THEY ENSURE THE INTRODUCTION OF THE WASHING CURRENT OF WATER TO EVERY PORTION OF THE FILTER BED.

SIDE ELEVATION



OF BATTERY OF TWO LOOMIS  
IMPROVED GRAVITY WATER FILTERS  
SHOWN ON OPPOSITE PAGE.



PLAN SHOWING  
SUPPORT SCREEN PLATES OR  
PERFORATED DIAPHRAGMS.

THEY ENSURE THOROUGH WASHING, AS THROUGH THEIR DISTRIBUTING POWER EVERY GRAIN OF THE FILTERING MATERIAL IS REACHED, DISLODGED AND SCOURED BY THE WASHING CURRENT OF WATER.

THEY ARE SUPPORTED AND HELD IN PLACE BY HEAVY CAST IRON GRATES CLAMPED TOGETHER WITH BRASS BOLTS.

THEY ARE PLACED AT THE BOTTOM OF THE MACHINE BETWEEN THE LOWER CYLINDER AND BOTTOM HEAD DIRECTLY UNDER THE FILTER BED.

THEY ENSURE ABSOLUTE PROTECTION FROM SAND.



## SIZES AND CAPACITIES

### DOUBLE CYLINDER AND SINGLE CYLINDER BONEBLACK, POLARITE AND SAND FILTERS

| Size Nos. | Supply Pipe | Cap'y Gal. per Min. | Shipp'g Weights in lbs. "L" Style | Shipp'g Weights in lbs. "M" Style | Size Nos. | Supply Pipe | Cap'y Gal. per Min. | Shipp'g Weights in lbs. "L" Style | Shipp'g Weights in lbs. "M" Style |
|-----------|-------------|---------------------|-----------------------------------|-----------------------------------|-----------|-------------|---------------------|-----------------------------------|-----------------------------------|
| 14        | 3/4"        | 4                   | 300                               | 600                               | 84        | 2 1/2"      | 50                  | 3,000                             | 6,000                             |
| 24        | 3/4"        | 6                   | 450                               | 900                               | 94        | 3"          | 100                 | 5,000                             | 10,000                            |
| 34        | 1"          | 8                   | 500                               | 1,000                             | 104       | 4"          | 150                 | 8,000                             | 16,000                            |
| 44        | 1 1/4"      | 12                  | 850                               | 1,700                             | 114       | 5"          | 200                 | 12,000                            | 24,000                            |
| 54        | 1 1/2"      | 16                  | 900                               | 1,800                             | 124       | 6"          | 250                 | 17,000                            | 34,000                            |
| 64        | 1 1/2"      | 22                  | 1,600                             | 3,200                             | 134       | 7"          | 325                 | 22,000                            | 44,000                            |
| 74        | 2"          | 30                  | 1,750                             | 3,500                             | 144       | 8"          | 400                 | 28,000                            | 56,000                            |

Supply-pipe connections will vary according to pressure and volume.

Capacity in gallons will vary according to the condition of the water to be filtered.

Capacities as above given are maximum and are based and guaranteed on Croton (New York) water, 35 pounds pressure.

In estimating capacities, due allowance must be made for Western or muddy waters.

We will be pleased to have our engineer prepare plans and specifications for any desired supply of water or requirement of construction.

Price list on smaller sizes will be mailed or delivered on application.

Estimates on larger sizes and complete Filter Plants, both pressure and gravity systems, large or small, will be promptly furnished.

The crushed flint sand used in the filter beds of the Loomis Improved Water Filters is especially prepared, screened and grained from the finest quarried flint.



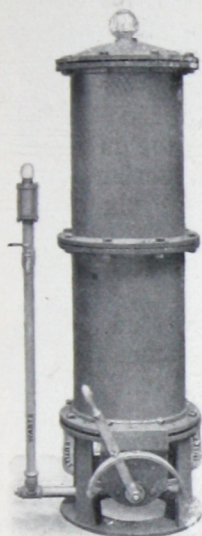
TYPE OR STYLE L



# ILLUSTRATION

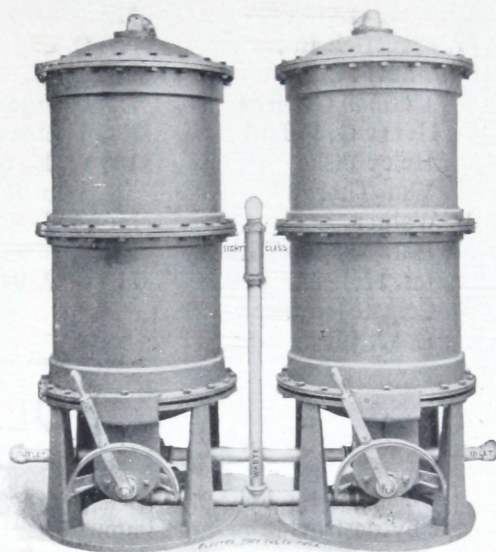
## BONEBLACK, POLARITE AND SAND FILTERS

COVERING THE MOST ADVANCED METHODS  
OF DOUBLE CYLINDER FILTRATION

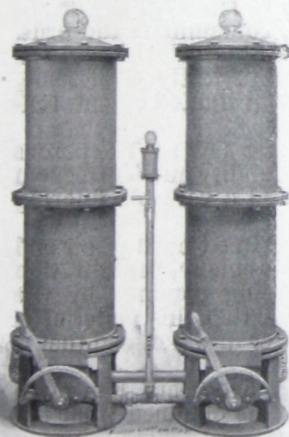


Type or Style "L"

There are two types or styles of construction for the Loomis Improved Water Filter in connection with the use of Boneblack, Polarite and Sand, as shown in accompanying cuts, viz.: Types or Styles "L" and "M."



Type or Style "M"



Type or Style "M"

### The Filtering Material Used in the Loomis Improved Single and Double Cylinder Filters

is made up in the following combinations to suit the local conditions surrounding the supply of water to be filtered, thus affording the widest range in the choice of a filtering medium :

- Boneblack both Cylinders.
- Boneblack one Cylinder, Polarite one Cylinder.
- Boneblack one Cylinder, Flint Sand one Cylinder.
- Polarite one Cylinder, Flint Sand one Cylinder.
- Polarite both Cylinders.
- Flint Sand both Cylinders.



## A Few Prominent New York Patrons

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### ST. LUKE'S HOSPITAL

|                            |                            |                         |
|----------------------------|----------------------------|-------------------------|
| Mrs. Astor                 | Mr. I. Townsend Burden     | Mr. Anson Phelps Stokes |
| Mr. C. B. Alexander        | Mr. Arthur C. James        | Mr. George S. Bowdoin   |
| Mr. H. O. Armour           | Mr. DeWitt C. Blair        | Mr. D. S. Appleton      |
| Mr. Prescott Hall Butler   | Mr. J. B. Bloomingdale     | Col. D. S. Brown        |
| Mr. Frederick A. Constable | Mr. H. G. DeForest         | Mr. J. B. Haggin        |
| Mr. R. Fulton Cutting      | Mr. Harvey Fisk            | Mr. John Hegeman        |
| Mr. James L. Speyer        | Mr. Nelson Robinson        | Mr. Thos. W. Prehm      |
| Dr. Frederick E. Hyde      | Mr. C. C. Jackson          | Mr. Alfred B. Maclay    |
| Hon. Levi P. Morton        | Mr. Chas. A. Lanier        | Mr. Phillips Phoenix    |
| Mr. Herman Oelrichs        | Mr. George R. Read         | Mr. Chas. A. Post       |
| Dr. Henry G. Piffard       | Mr. Thomas F. Ryan         | Mr. Grant B. Schley     |
| Mr. Haley Fiske            | Dr. W. H. Simonson         | Mr. Samuel Sachs        |
| Mr. Wm. Thorne             | Mr. Wm. E. Tefft           | Mr. F. R. Townsend      |
| Dr. Walker                 | Mrs. J. J. Wyson           | Mr. F. C. Lawrence      |
| Mr. Harry Payne Whitney    | Mr. Frederick C. Cromwell  | Mr. C. H. Dodge         |
| Mr. Jas. McLean            | Mr. C. W. Baldwin, Orange, | Mrs. Elliot F. Shepard  |
| Mr. Colgate Hoyt           | N. J.                      | Mr. John D. Crimmins    |
| Mr. E. W. Bliss            |                            |                         |

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## POLARITE

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The admixture of Polarite with flint sand forms a filtering medium which purifies itself by destroying organic impurities which would otherwise contaminate the beds. The process of combustion is constantly going on in the pores of the material, and the products of that combustion are tasteless, odorless, colorless and perfectly wholesome, creating carbonic acid, with which the water becomes charged to a limited extent, rendering it sparkling as well as palatable in the highest degree.

Sir Henry Roscoe speaks very favorably of this material. He says: "The porous nature of the oxide which is used in the filter, its complete insolubility and its freedom from rusting, constitute, in my opinion, its claim to be considered a valuable filtering material."

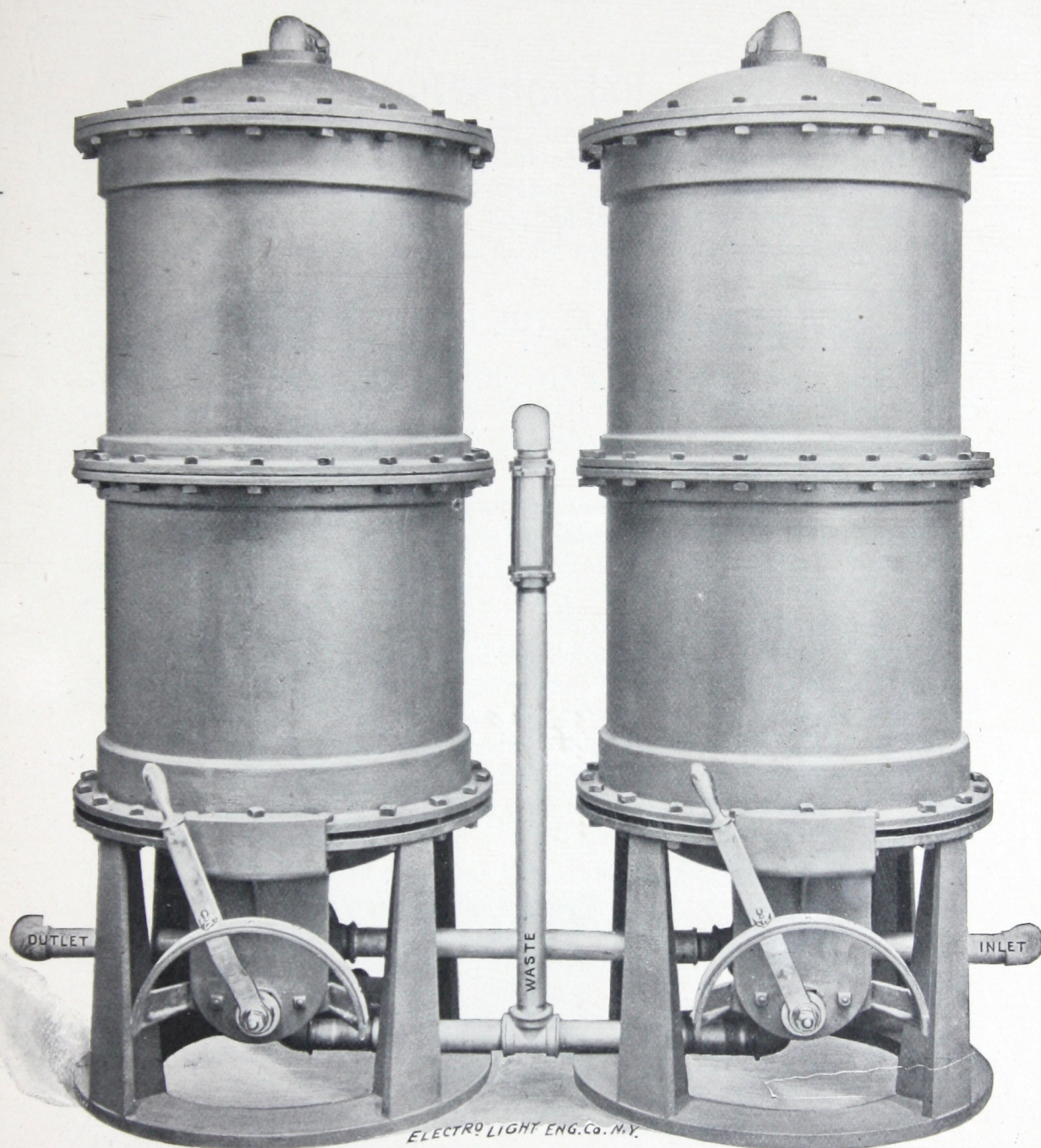
Dr. Angell states that "this material, though it permits the free transit of air and gases, is quite impermeable to atmospheric germs." Lastly and chiefly, the filtration by this process has been proved to be much purer than anything obtained by the ordinary process of filtration; in fact, we may, with safety, state that this material is capable of exercising a powerful effect on dissolved organic matter in water, and that it is one of the safest media in the market.

In January, 1893, after the Polarite had been in use nearly five years, Mr. Mare reported: "We have been well pleased and satisfied with the results obtained from the Polarite, for whenever we have our water analyzed we always receive a report as being perfectly pure." Professor Corfield wrote with his second analysis that we had "*a very pure water.*"

POLARITE MORE FULLY DESCRIBED IN SPECIAL CIRCULAR



## FILTRATION—DOUBLE CYLINDER



DOUBLE CYLINDER. BONEBLACK. LOOMIS IMPROVED WATER FILTERS



## EXPLANATION

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The most important feature of a filter—and *we cannot impress this point too earnestly upon the purchasing public*—is the cleansing of the filter bed.

The efficiency of a filter, its life, and, of course, its economy, depends on the ease and thoroughness with which its bed can be cleansed.

### THE KEYSTONE OF THE FILTRATION ARCH IS A CLEAN FILTER BED,

and there is only one successful method of obtaining it, and that is through the Loomis system.

The filter bed rests upon heavy perforated brass screen plates, heavily tinned, properly secured and supported, *which extend over the entire area of the cylinder, thus insuring the introduction of the washing current of water to the whole bed.* In this way every grain of the filtering material is reached and thoroughly agitated and scoured.

The filter bed is evenly proportioned to the supply of water introduced to each machine, in that it shall and can be perfectly washed, for you can as easily overload a stream of water as you can any other form of power.

Many years of experiment and observation on our part, and a study of the results obtained by other practical investigators, have convinced us that a practical, efficient and permanent filter must have, as a filter bed, an indestructible and easily-cleaned material.

If a filter bed cannot be thoroughly and easily cleaned, its efficiency is destroyed, for it is plain that it would be impossible for water to be pure and clean when successive accumulations of dirt are not readily removed, as, when this operation is not effectually performed, it is simply a question of a short time when it will become choked up and worse than useless.

Hence it is an absolute requirement that proper and efficient aids shall be provided to assist and render certain the work of the cleansing current of water, and that such aids are embodied to perfection in the

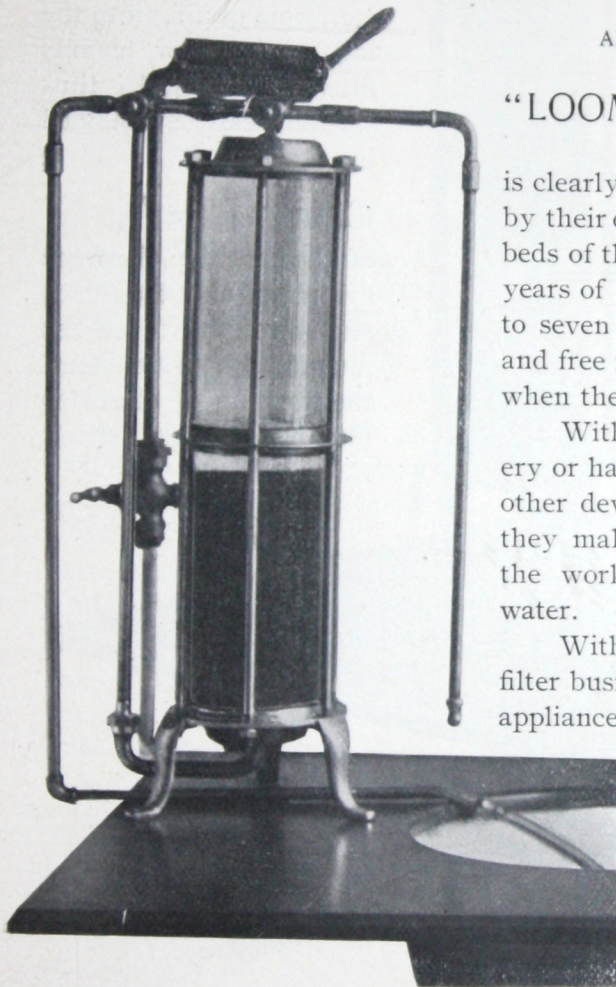


# INSPIRATION

## "LOOMIS CUTTING PLATE"

AND THE

## "LOOMIS CONFINING PLATE"



GLASS MODEL. FIRST VIEW  
The Filter is in active operation, producing pure,  
sparkling water

is clearly demonstrated and fully proven by their efficiency in service, for the filter beds of the Loomis, when examined after years of service (instances of from three to seven years), are as sweet and clean and free from accumulated impurities as when they were put into service.

Without outside aid, such as machinery or hand-power for operating rakes or other devices for stirring up filter beds, they make washing certain and perfect the work of the cleansing current of water.

With twenty years' experience in the filter business, we have yet to find any appliances used in the scientific or successful filtration of water that approach their work, and they stand to-day unchallenged and unequalled.

The use of these essential features in filtering apparatus is confined exclusively to the Loomis Filters by United States patents.



## “The Loomis

is placed at the top of the upper cylinder and the escape or wastage during the washing matter how violently it also prevents the large particles, fish, filter bed and become in common with the showing that perfect without loss of filter-

“The Loomis is placed in the centre the upper and lower above the filter bed, and its mass of accumulation and repass during operation until the freed from the impu-

## Confining Plate”

of the machine, between the top head, and prevents of the filtering material or scouring process, no the material is agitated; coarser impurities and etc., from getting into the ing part of or tenants filtering material, thus washing can be obtained ing material.

## Cutting Plate”

of the machine, between cylinders, about an inch and through it the bed mulated impurities must the washing or cleansing filter bed has been entirely rities.



“THROUGH THE LOOMIS CUTTING PLATE”  
GLASS MODEL. SECOND VIEW

The cleansing process has begun, the current has been reversed, and the filter bed is being lifted bodily upwards and “through the Loomis Cutting Plate.”



The accompanying illustrations, pages 29, 30 and 32, with photographs of the glass model, taken while at work, represent, in a measure, the use of these inventions in the process of cleansing the filter bed.

In the first the filter is in active operation, producing pure, sparkling water.

Immediately above the filtering material is the

### “Loomis Cutting Plate”

As the impurities in the water are removed they accumulate in a mass or cake, in fact, are actually woven into a mat on top of the filter bed, and if this cake or matted formation is not broken up and thoroughly disintegrated, it will roll or ball up during the washing process, and not only clog, but will contaminate a filter bed, utterly destroying its efficiency as a purifying medium, and will steadily diminish the water-supply, hence the use of the “Loomis Cutting Plate,” for as soon as the washing current is introduced at the bottom of the filter the bed is lifted bodily upward and is forced through the “Cutting Plate” as per second cut glass model, page 30, which literally tears the matted film of impurities into infinitesimal fragments, and at the same time thoroughly breaks up the bed, separates and perfectly scours each grain of filtering material; the bed being actually boiled by the force of the reverse current of water in a space twice the size it occupies during the filtering process, the impurities having been separated from the bed and broken up into minute particles by the “Loomis Cutting Plate,” and are carried out of the filter through the waste pipe by the reverse current of water. During this process the

### “Loomis Confining Plate”

at the top of the machine prevents the filtering material from escaping or wasting.



# "The Only Filter That Can Perfectly Cleanse Itself"

We say, without fear of contradiction, that the Loomis Improved Water Filter is the "only filter that can perfectly cleanse itself."

When we say "perfectly cleanse itself," we do not mean simply loosening and slightly agitating the filter bed with the cleansing current of water; but we do mean perfectly cleansed, by first completely breaking up the mass of filtering material and collected impurities with that wonderful invention, the "Loomis Cutting Plate," and then by violent agitation and attrition actually scouring from the surface of each particle of filtering material the impurities and filth removed from the water, and washing these impurities out of the filter with the volume and force of the reverse current of water.

## INFORMATION

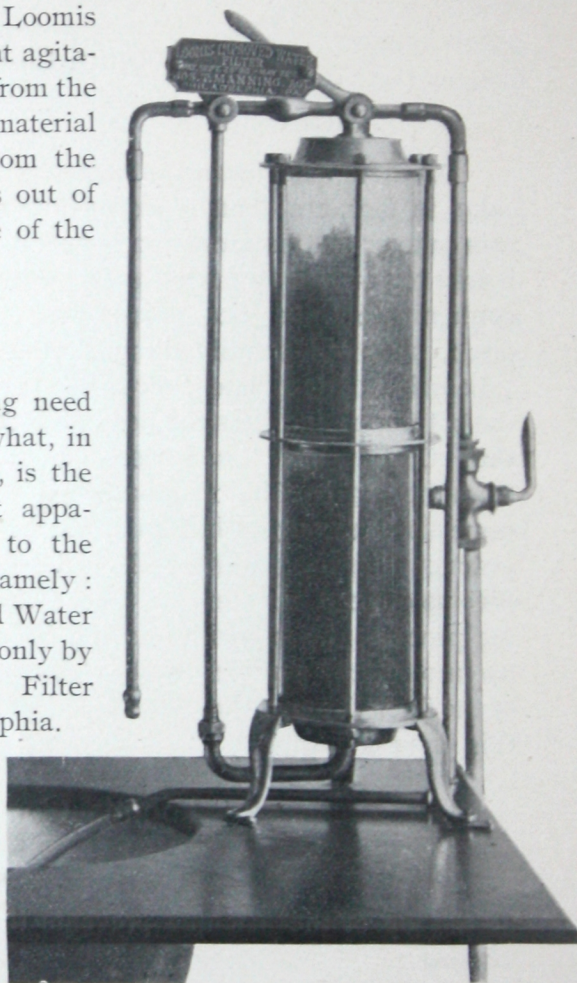
### The Crying Need

To meet this crying need of the hour, we offer what, in the opinion of experts, is the best and most perfect apparatus so far brought to the attention of science, namely: The "Loomis Improved Water Filter," manufactured only by the Loomis-Manning Filter Company, of Philadelphia.

### The Perfect Filter

The perfect filter should combine efficiency, simplicity, economy and durability.

The "Loomis" possesses these essential features fully and effectually.



GLASS MODEL. THIRD VIEW  
BOILING FILTER BED



**Efficiency**

They are efficient, furnishing a clear, pure and sparkling water. They remain efficient because they can be thoroughly, quickly and automatically cleansed.

**Simplicity**

They are simplicity itself, the entire process of filtration and cleansing being operated and controlled by a single lever moving over a registered dial, on which are the following stations: "Filtering," "Filtering to Waste," "Washing Filter Bed," and "By Pass," thus showing by the location of the lever exactly what the filter is doing, and rendering mistakes by attendants impossible.

There is no complicated system of valves, cocks or other attachments to be handled. No expert knowledge is required; any one can attend to them.

**Economy**

They are economical on account of their simplicity of construction and their efficiency, and because the process of cleansing is so thorough that they stand for years, as is attested by documentary evidence in our possession, of *seven years' use without one dollar of expense.*

**Durability**

They are durable, because, being simple, there are no delicate parts to be broken or worn away by the action of the water, and nothing but the best material and most skilful workmanship is employed in their construction.

Furthermore, they are sightly and attractive in style and accord fitly with the present high standard of architectural completeness.

**Superiority**

It is the only filter that does not lose its filtering material. Our claim of superiority for the Loomis Improved Water Filter is based on its durable and simple construction, its efficient work, the ease with which its filter bed can be cleansed, and the consequent economy of its operation.

---

## A Few Prominent Baltimore Patrons

### Johns Hopkins Hospital

Mr. Charles Joseph Bonaparte  
Gen. John Gill  
Mr. Nelson Perin  
Mr. Louis M. McLean  
Mr. James McEvoy  
Mr. W. Graham Bowdoin  
Mr. John R. Bland

Mr. Geo. C. Jenkins  
Mr. Henry B. Gilpin  
Mr. Osmun Latrobe  
Mrs. Robert Garrett  
Col. Charles Marshall  
Judge Charles E. Phelps  
Capt. Geo. W. Wood

Mr. Charles D. Fisher  
Mr. Douglas H. Thomas  
Mr. Theodore Marburg  
Mr. W. W. Spence  
Mr. Chas. E. Dickey  
Mr. N. M. Harrison  
Thomas & Thompson



# CONSTRUCTION

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ONLY THE VERY BEST MATERIALS ENTER INTO THE CONSTRUCTION OF

## THE LOOMIS IMPROVED WATER FILTER

In Nos. 14, 24, 34, 44, and 54 is used the finest gray iron dry sand castings, porcelain-lined cylinders, the best steam metal brass castings, tinned and nickel-plated, the best seamless brass tubing, tinned and nickel-plated, and perforated brass screen plates, heavily tinned.

In the larger sizes the finest gray iron dry sand or loam castings are used, with pipe and fittings of the very highest grade galvanized iron, best steam metal brass castings and perforated brass screen plates, heavily tinned.

Levers, dials, etc., are of brass, tinned, nicked and polished, and every effort is made and no expense spared to make a handsome as well as practically indestructible machine.

Porcelain-lined cylinders are furnished for Nos. 64, 74, 84, 94, and 104, when desired, for which an extra charge is made. All of the larger sizes can also be furnished when so desired with brass tubing and brass fittings, for which an extra charge will be made.

---

MR. FRANCIS BLAKE

BOSTON

ABURNDALE P. O.

KEEWAYDIN, WESTON, MASS.

DEAR SIR:—In reply to your letter of the 17th instant, I have to say that I am delighted with the service rendered by the Loomis Improved Water Filter, attached four months ago to the pipe from which we draw our water-supply for table use. You may remember that at the time I placed my order with your agent I remarked that I did so solely because I wished to possess a working model of a most beautiful mechanical invention. I was then of the opinion that the water supplied by our private water works was of such purity that no filtration thereof was necessary. I must now, however, frankly admit that examinations, from time to time, of the "reversed filter discharge" have convinced me that the machine adds very much to the purity of our water-supply.

Very truly yours,

FRANCIS BLAKE.

March 19, 1896.



# A Few Prominent Filter Plants

INSTALLED BY THE LOOMIS-MANNING FILTER CO.

## NEW YORK

St. Luke's Hospital  
Presbyterian Hospital  
New York Condensed Milk Co., Purdy's  
N. Y.; Walkill, N.Y., and Algonquin,  
Ills.  
Hotel Manhattan  
Delmonico's, Fifth Avenue and Forty-  
fourth Street  
Hotel St. Andrew's  
Hotel Buckingham  
Park Madison Apartment House  
Monticello Apartment House  
New York Life Building  
St. Paul Building  
Metropolitan Life Building  
Bank of Commerce Building  
St. James Building  
Hartford Building  
Metropolitan Telephone and Telegraph  
Building  
American Tract Society Building  
Constable Building  
Bowling Green Offices  
B. Altman & Co.  
Y. M. C. A. New Club Building  
St. Michael's New Parish House  
Market and Fulton National Bank  
Siegel, Cooper & Co.  
Colgate & Co.  
U. S. Appraisers' Warehouse  
Dun Building  
Singer Building

## BALTIMORE

Johns Hopkins Hospital  
Hotel Rennert  
Carroll Manufacturing Company  
Germania Brewing Company  
Fidelity Trust and Deposit Company  
United States Court House and Post-Office  
Building  
A. S. Abell & Co. (Sun Iron Building)  
Graham's Storage Warehouse

The Johnson Company, Lorain, O.  
Footer's Dye Works, Cumberland, Md.  
Long Pier (Young & McShea), Atlantic  
City, N. J.

## PHILADELPHIA

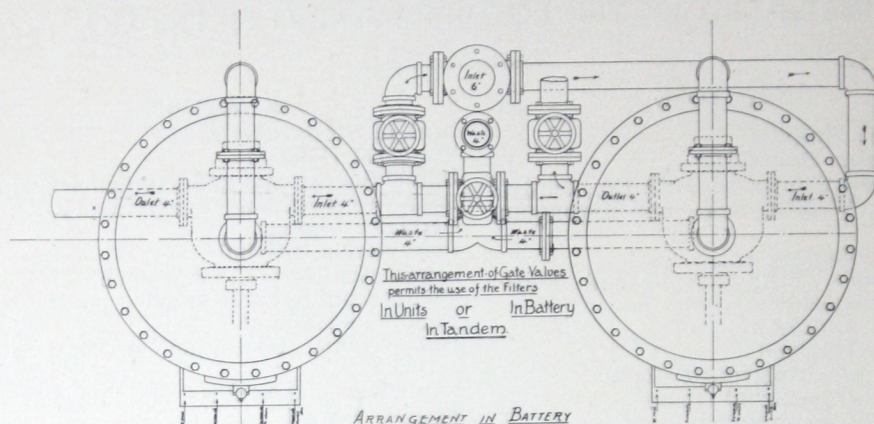
Bank of North America  
Episcopal Hospital  
United States Sugar Refinery, Camden, N. J.  
Broad Street Station (Pennsylvania R.R.)  
German Hospital  
Presbyterian Hospital  
Kensington Hospital for Women  
Medico-Chirurgical Hospital  
Children's Hospital  
Pennsylvania Institution for Deaf and  
Dumb  
Physicians' and Dentists' Building  
Friends' School  
St. Joseph's Home for Boys  
George Nugent Home for Eaptists  
House of Refuge for Girls  
House of Refuge for Boys, Glen Mills, Pa.  
Hotel Walton  
Continental Hotel  
The Newton  
Harrison Building  
Betz Building  
Fidelity Mutual Life Building  
Franklin Building  
Philadelphia Savings Fund Society B'ld'g.  
Odd Fellows' Temple  
City Trust, Safe Deposit and Surety Co.  
Baptist Publication Society Building  
Girard Estate Building  
Land Title and Trust Company's Building  
Wissahickon Inn (Swimming Pool)  
Pennsylvania Fire Insurance Company's  
Building  
Thomas Clements Bottling Company  
Frankford Arsenal

## WASHINGTON

Executive Mansion (White House)  
State, War and Navy Department Building  
Treasury Department Building  
New Post-Office Building  
Hydrographic Office  
Bureau of Engraving and Printing  
Post-Office Building  
Congressional Library Building  
Corcoran Gallery of Art  
Robert Portner Brewing Company, Norfolk,  
Va., Lynchburg, Va., and Alexandria,  
Va.  
Portner Apartment House

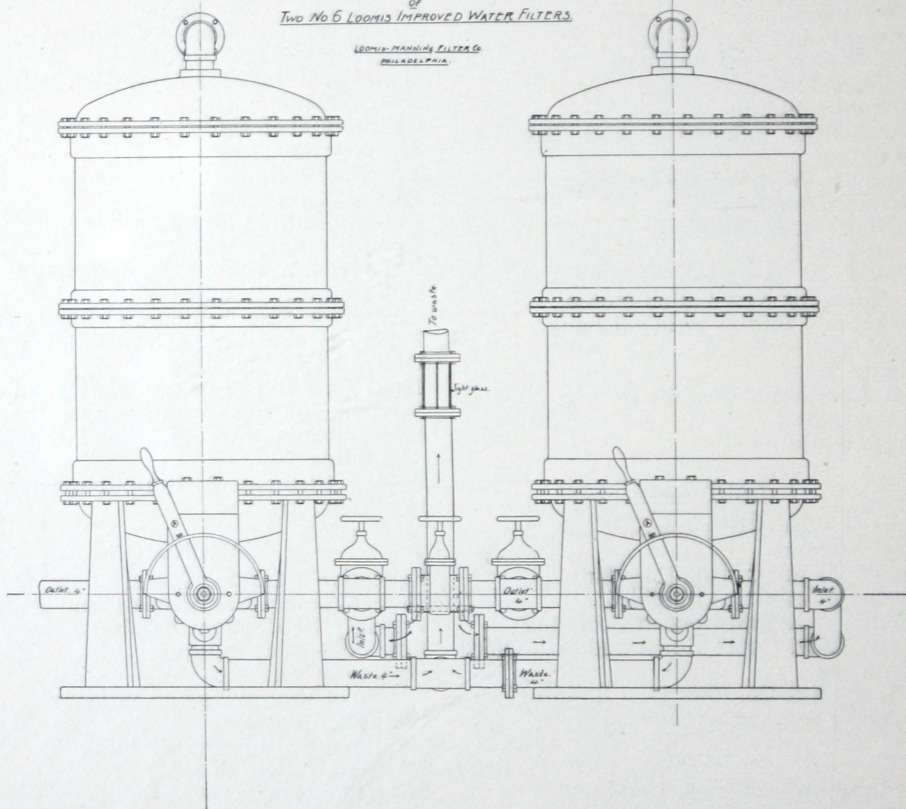


# ARRANGEMENT IN BATTERY



ARRANGEMENT IN BATTERY  
OF  
Two No 6 LOOMIS IMPROVED WATER FILTERS.

LOOMIS-TRADING FILTER Co.  
PHILADELPHIA.



ARRANGEMENT IN BATTERY OF TWO No. 6 LOOMIS IMPROVED WATER FILTERS  
AT THE NEW UNITED STATES APPRAISERS' WAREHOUSE, NEW YORK CITY



*Pennsylvania Railroad Company.*  
*General Office,*

JOHN C. SIMS,  
*Secretary,*  
D. S. NEWHALL,  
*Asst. Secretary*

*Philadelphia,* September 13th, 1897.

Dear Sir:-

In reply to yours of the 10th instant, I beg to advise you that we have had one of your filters in use at our General Office for the past three years. During that time there have been about two hundred thousand gallons of water filtered daily, except on Sundays and holidays, when we filter about thirty thousand gallons. Up to the present time we have not had any trouble whatever, and no repairs. The filtering material has not been renewed since its installation, and at present it appears to be good for service for a long time to come.

I have had a great deal of experience with filters of various kinds, and have never met with one before so simple and effective in its operation.

Trusting this will answer your inquiry, I remain,

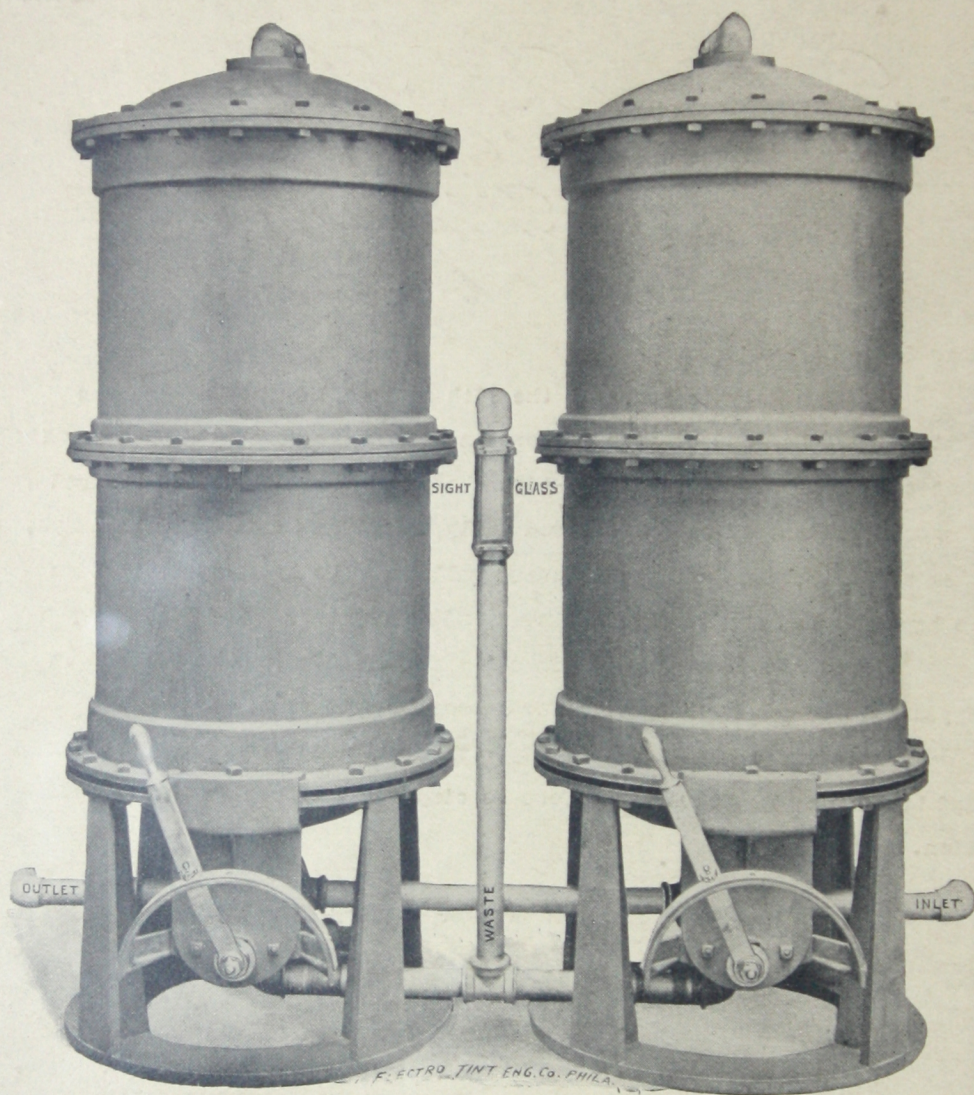
Yours truly,

*M. H. Golden*

Superintendent Genl. Office Bldg.,  
P.R.R. Co. Broad St. Sta., Phila.

Mr. J. T. Manning,  
President, Loomis-Manning Filter Co.,  
402 Chestnut Street, Phila.





**DOUBLE CYLINDER BONEBLACK.  
LOOMIS IMPROVED WATER FILTERS.**

PRESS OF EDWD. STERN & CO., INC., PHILA.



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